

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	1	"20050284688"	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:52
L3	1	2 and ( apply\$3 with (set near point\$1) ) and (steering with column) and (assistance with motor\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:32
L4	1	2 and ( apply\$3 with (set near point\$1) )	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:48
L5	402	(702/94).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/15 11:49
L6	332	(702/33).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/15 11:49
L7	738	(702/41,42,43,44).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/15 11:49
L8	99	(702/96).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/15 11:49
L9	482	(702/142,145).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/15 11:49
L10	1566	(701/41,42).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/15 11:50
L11	6	((assistan\$3 near torque) with motor\$1) same ((angle phase) near sens\$3) same (speed velocity)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:53
L12	0	11 and 5	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:54
L13	0	11 and 6	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:54
L14	1	11 and (5 6 7 8 9 10)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:54
L15	0	14 and (comput\$4 with set\$1point\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:55

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L16	0	14 and (comput\$4 with set\$1point\$1) and (((varia\$5 with load\$1) (load\$1 near varia\$5)) with (comput\$4 obtain\$3 calculat\$4))	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:56
L17	0	14 and (comput\$4 with set\$1point\$1) and (((varia\$5 with load\$1) (load\$1 near varia\$5)) with (comput\$4 obtain\$3 calculat\$4)) and (PID with filter\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:57
L18	3607	(steering with assist\$4 with system\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:57
L19	0	18 and 5	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:57
L20	0	18 and 6	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:57
L21	1955	(5 6 7 8 9)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:57
L22	6	21 and 18	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:58
L23	0	22 and (PID with control\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:58
L24	0	22 and (PID with ( filter\$3 control\$3) )	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 11:58
L25	2	22 and ((angular with sens\$3) ((phase\$1 angle\$1) with sens\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:14
L26	0	22 and ((angular with sens\$3) ((phase\$1 angle\$1) with sens\$3)) and (load with variat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:15
L27	0	(load\$1 with variat\$3) same (postion\$1 near sensor\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:20
L28	2426	(load\$1 with variat\$3) and (position\$1 with sensor\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:21
L29	1	28 and 5	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:21

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L30	1036	(load\$1 with variat\$3) and (position\$1 with sensor\$1) and ((angular angle\$1 phase\$1) with sensor\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:22
L31	33	30 and (steer\$3 with assist\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:22
L32	1	31 and (PID with filter\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:23
L33	3	31 and (steer\$3 near column\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:26
L34	3	31 and (((steer\$3 near column\$1) shaft\$1) with rigid\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:27
L35	1	31 and (((steer\$3 near column\$1) shaft\$1) with rigid\$3) and (PID with filter\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:43
L36	1	((steer\$3 with (electric\$3 assist\$4 power)) same (torque\$1) same ((phase angle\$1 angular\$3) with sens\$3) same (load with variat\$3) same ((steer\$3 near column\$1) shaft) ) and (threshold\$1 set\$1point\$1 (set near point\$1))	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:02
L37	6564	(position\$1 near sensor\$1) with (shaft\$1 (steering near column\$1))	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:04
L38	11	37 and 5	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:12
L39	0	38 and 18	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:50
L40	0	38 and 34	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:50
L41	0	((angle with sens\$3) same ((pid (proportion\$3 different\$3 integra\$3)) with (control\$3 and compensat\$3))) same (torque with steer\$3) same (load\$3 with variat\$3) same (shaft\$1 (steer\$3 with column\$1)) same ((agnle\$1 angular phase) with sensor\$1 with measur\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:12

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L42	0	(((angle with sens\$3) same ((pid (proportion\$3 different\$3 integra\$3)) with (control\$3 and compensat\$3))) same (torque with steer\$3) same (load\$3 with variat\$3) same (shaft\$1 (steer\$3 with column\$1)) same ((angle\$1 angular phase) with sensor\$1 with measur\$4)).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:02
L43	1	(((steer\$3 with (electric\$3 assist\$4 power)) same (torque\$1) same ((phase angle\$1 angular\$3) with sens\$3) same (load with variat\$3) same ((steer\$3 near column\$1) shaft) ) and (threshold\$1 set\$1point\$1 (set near point\$1))).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:02
L44	1	(((steer\$3 with (electric\$3 assist\$4 power)) same (torque\$1) same ((phase angle\$1 angular\$3) with sens\$3) same (load with variat\$3) same ((steer\$3 near column\$1) shaft) ) and (threshold\$1 set\$1point\$1 (set near point\$1)) and ((PID (proportion\$3 integra\$3 different\$3)) with (filter\$3 control\$3))).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:03
L45	0	44 and 5	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:03
L46	0	44 and 6	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:03
L47	0	44 and 7	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:04
L48	0	44 and 8	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:04
L49	0	44 and 9	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:04
L50	1	37 and 34	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:04
L51	0	((angle with sens\$3) same ((pid (proportion\$3 different\$3 integra\$3)) with (control\$3 and compensat\$3))) same (torque with steer\$3) same (load\$3 with variat\$3) and 37 and 5	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 13:12

## EAST Search History

S1	1	("20050284688").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/03/15 11:29
S2	1	S1 and (PID and filter\$3 and steer\$3 and vehicle and (column near steering) and (assistance near motor) and (torque near assistance) and angle\$1 and (sensor\$1) and (load near variation) )	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 14:44
S3	1	(PID and filter\$3 and steer\$3 and vehicle and (column near steering) and (assistance near motor) and (torque near assistance) and angle\$1 and (sensor\$1) and (load near variation) )	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 14:52
S4	1	(PID with filter\$3) same (assistan\$3 with (steer\$3 with torque))	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/11 14:52
S5	1	("5659473").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:05
S6	2	((("6,138,788") or ("20040084241")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:08
S7	5456	(torque with sensor\$1) and (angle\$1 with sensor\$1)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:08
S8	42	((torque with sensor\$1) and (angle\$1 with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:14
S9	1	((torque with sensor\$1) and (angle\$1 with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) same (set near point with motor\$1)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:11
S10	1	((torque with sensor\$1) and (angle\$1 with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) same (set near point with motor\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/11 16:11
S11	0	((torque with sensor\$1) and (angle\$1 with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) same (angle\$1 with ((measur\$4 obtain\$3) and compensat\$3 and filter\$3))	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:12
S12	0	((((torque with sensor\$1) and (angle\$1 with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) ) and ((filter\$3 and compensat\$3) with (measur\$4 and angle\$1))	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:13

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S13	0	((torque with sensor\$1) and (angle\$1 with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) ) and ((filter\$3 and compensat\$3) with (measur\$4 and angle\$1))	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/11 16:14
S14	1	((torque with sensor\$1) and (angle\$1 with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) ) and ((compensat\$3 filter\$3) with pid)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/11 16:14
S15	1	((torque with sensor\$1) and (angle\$1 with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) and filter\$3 with pid	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:14
S16	14	((torque with sensor\$1) and (angle\$1 with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) and (filter\$3 compensat\$3)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:49
S17	19	("4653601"   "4664211").PN. OR ("4753309").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:24
S18	1	((torque with sensor\$1) and ((angle\$1 phase\$1 )with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) and (filter\$3 compensat\$3) and (rigid\$3 with torque\$1)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/11 16:49
S19	1	((torque with sensor\$1) and ((angle\$1 phase\$1 )with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) and (filter\$3 compensat\$3) and (rigid\$3 with torque\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/11 16:50
S20	1	((torque with sensor\$1) and ((angle\$1 phase\$1 )with sensor\$1) ) same (steer\$3 with motor\$1 and assistan\$3) and (filter\$3 compensat\$3) and (rigid\$3 with torque\$1)).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/11 16:50
S21	172	(angle with sens\$3) same ((pid (proportion\$3 different\$3 integra\$3)) with (control\$3 and compensat\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/11 17:37
S22	6	((angle with sens\$3) same ((pid (proportion\$3 different\$3 integra\$3)) with (control\$3 and compensat\$3))) same (torque with steer\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/09/11 18:30
S23	0	((angle with sens\$3) same ((pid (proportion\$3 different\$3 integra\$3)) with (control\$3 and compensat\$3))) same (torque with steer\$3) same (load\$3 with variat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/15 12:57

### EAST Search History

S24	2	((("6876911") or ("4753308"))).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/12 16:02
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